```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
     115-77-5 REGISTRY
RN
     1,3-Propanediol, 2,2-bis(hydroxymethyl)- (9CI)
                                                      (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Pentaerythritol (8CI)
OTHER NAMES:
     1,1,1-Tris(hydroxymethyl)ethanol
CN
     2,2-Bis(hydroxymethyl)-1,3-propanediol
CN
     Auxinutril
CN
     Hercules P 6
CN
CN
     Maxinutril
     Metab-Auxil
ĆN
     Monopentaerythritol
CN
CN
     Monopentek
     Neulizer P
CN
     NSC 8100
CN
     PE 200
CN
     PE 200 (diol)
CN ·
CN
     Penetek
CN
     Pentarit S
CN -
     Pentek
     PÉT 020
CN
     Tetra (hydroxymethyl) methane
CN
     Tetrakis (hydroxymethyl) methane
CN
CN
     Tetramethylolmethane
CN.
     THME
FS
     3D CONCORD
     75398-86-6, 88201-29-0
DR
MF
     C5 H12 O4
CI
     COM
ĹC
                  ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES,
       DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2,
       GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, MEDLINE,
       MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO,
       TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA
       CAplus document type: Book; Conference; Dissertation; Journal; Patent;
ŔĿ.P
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
       MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
       (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
       NORL (No role in record)
       Roles for non-specific derivatives from patents: ANST (Analytical
       study); BIOL (Biological study); MSC (Miscellaneous); PREP
       (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
       reagent); USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
       (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
       (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
       study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC
       (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);
       PRP (Properties); RACT (Reactant or reagent); USES (Uses)
```

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-CH}_2-\text{OH} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9045 REFERENCES IN FILE CA (1907 TO DATE)

3276 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9054 REFERENCES IN FILE CAPLUS (1907 TO DATE)

10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

Properties: Crystallizes in needles from dilute alcohol. Mp 193C. Slightly soluble in acetone, petroleum ether, benzene, and carbon tetrachloride. Derivation: From stigmasterol or other steroids.

Use: Medicine, biochemical research.

Prelog, 'Vladimir. (1906—). A Swiss organic chemist who won the Nobel prize for chemistry in 1975 along with Cornforth for work on chemical synthesis of organic compounds. Although educated in Yugoslavia, he spent many years in Zurich.

premix molding. A mixture of plastic ingredients prepared in advance of the molding or extruding operation and stored in bags or bins until required. It is made by mixing the components (resin, filler, fibrous materials such as glass and necessary curatives) in a dough blender. Storage life may be from a few days to a year or more, depending on formulation. Such mixtures are then calendered or extruded after warming to suitable temperature.

prenitene. (1,2,3,4-tetramethylbenzene; prenitol). $(CH_3)_4C_6H_2$.

Properties: Colorless liquid. D 0.901, bp 204C, fp -7.7C. Soluble in alcohol; insoluble in water.

prepolymer. An adduct or reaction intermediate of a polyol and a monomeric isocyanate, in which either component is in considerable excess of the other. A polymer of medium molecular weight having reactive hydroxyl and —NCO groups.

Use: Preparation of polyurethane coatings and foams.

prepreg. A term used in the reinforced plastics field to mean the reinforcing material containing or combined with the full complement of resin before molding.

"Pre-San" [Mallinckrodt]. [N-(2-mercapto-ethyl)benzenesulfonamide-S-(O,O-diisopropyl-phosphorodithioate)]. TM for a selective herbicide.

preservative. Any agent that prolongs the useful life of a material. Food products are preserved by (1) low temperature, (2) ionizing radiation (X and y rays), (3) antioxidants, (4) fungicides, (5) aldehydes, (6) paints, and others.

Use: Antioxidants in lubricating oils, rubber, and plastics; fungicides on textiles; aldehydes on biological specimens; paints on wood and metals.

See protective coating; antioxidant; radiation, industrial.

press, hydraulic. See hydraulic press.

"Prestabit Oil" V. TM for an anionic textile chemical consisting of purified, sulfated castor-oil fatty acids.

Use: Dyeing assistant for cotton and wool fiber, in viscose manufacture, clarifying agent to prevent

milkiness of the yarn, antistatic agent for acetate and polyacrylonitrile fibers.

"Preventol" [Monsanto]. TM for a skin degerming agent.

Properties: White to greyish-white powder. **Use:** Incorporation into bar soaps.

Prevost reaction. Hydroxylation of olefins with iodine and silver benzoate in an anhydrous solvent to give *trans*-glycols.

Priestly, Joseph. (1733–1804). Born near Leeds, England, Priestley originally planned to enter the ministry. As a youth he became interested in both physics and chemistry, and his research soon established his position as a scientist. He was elected to the Royal Society in 1766. He discovered nitrous oxide in 1772, but his greatest contribution to science was his discovery of oxygen in 1774. He emigrated from England to Northumberland, PA, where he lived from 1784 to his death. His research in America resulted in the discovery of carbon monoxide (1799).

Prigogine, Ilya. (1917-). A Belgian chemist who won the Nobel prize for chemistry in 1977 for his contributions to nonequilibrium thermodynamics. His education was at the University of Brussels. The Center for Statistical Mechanics and Thermodynamics at the University of Texas bears his name.

Prilezhaev (Prileschajew) reaction.

Formation of epoxides by the reaction of alkenes with peracids.

prills. Small, round, or acicular aggregates of a material, usually a fertilizer, that are artificially prepared. In the explosives field, prills-and-oil consists of 94% coarse, porous ammonium nitrate prills and 6% fuel oil.

See explosives, high.

"Primacord". FM for a detonating composition. See pentaerythritol tetranitrate.

"Primafloc" [Rohm & Haas]. TM for a series of organic polyelectrolyte products used for floculating suspended solids in water, waste, and process streams.

See polyelectrolyte.

"Primal" [Rohm & Haas]. TM for aqueous dispersions of acrylic resins, supplied in various grades that differ in hardness and flexibility and produce finishes that are water insoluble, require no plasticizer for flexibility, are unimpaired by aging, and adhere tenaciously to leather and lacquer coats.

primary. (1) In reference to monohydric alcohols, amines, and a few related compounds, this term,

